FACULTY OF
ARCHITECTURE

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MIM-ENT-ICM

tes112e

VISUAL COMMUNICATION I:
VISUALIZATION & TECHNICAL DRAWING

Section 6

2022-2023 Fall
Friday 08:30 – 12:30

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Syllabus

VISUAL COMMUNICATION I: VISUALIZATION AND TECHNICAL DRAWING

COURSE OBJECTIVE and DESCRIPTION

TES112E Visual Communication 1 course aims to increase the interaction and coordination between the mind and hand. It will be a vital tool to develop and improve your design ideas. Communicating is via sketches, perspectives, use of images, renderings, texts; communicating will work for two partners: allows you to see; and for other people to whom you want to describe your ideas.

The studio will concentrate on introducing you to the media and give you critical experience on how to use it effectively: you will sketch to externalize ideas, draw to map and represent, and then produce and reproduce these productions into eloquent graphics. This semester will provide a solid, heart-felt, and hand-felt foundation of various techniques and approaches to both visualization and representation of ideas, processes, and relationships. Hence, the course forms a basis for your future development as a planner and designer.

Besides visualization and communication of ideas, two major issues to be covered are “graphics” and “technical drawing”. You will be introduced to the fundamental concepts of graphics – the issues related to the performance of the various elements of a visual or artboard. Technical Drawing on the other hand will allow you to develop your skills in 3D thinking, handling an object in its physicality and in Cartesian space, and effectively mapping formal properties. This will be a fundamental basis for you to understand and communicate – in an architectural manner – various archetypal forms in context and in scale.

COURSE CONTENT

The course consists of 14 weeks

WEEK 1 - Introduction/Sketch Exercise

Introduction to Visual Communication I course. As a studio exercise, students will be expected to practice sketching using different techniques given by the instructors.

WEEK 2 - Shape Representation Experiment

The problem of uniquely describing a three-dimensional shape using a two-dimensional medium will be clarified: drawing-based reproductions will be compared against their original counterpart to detect ambiguities in the drawings.

WEEK 3 - Horizontal Section and Parallel Projection

A lecture will be given on plan, top view, scale. Studio exercises will be carried out involving different scales, where the roles of lineweight and linetype will be emphasized.

WEEK 4 - Parallel Projection

A lecture will be given on elevation. As a studio exercise, students are expected to draw the elevation of a selected part of Taskisla.

WEEK 5 - Vertical Section

A lecture will be given on the section and a studio exercise will be carried out.

WEEK 6 - Context Drawing/Basic Annotation I

A lecture will be given on axonometric drawing. As a studio exercise, isometric drawing will be given.

WEEK 7 - Context Drawing/Basic Annotation II

A lecture will be given on axonometric drawing. As studio exercise, cavalier, cabinet and military drawings will be given.

WEEK 8 - Fall Break

WEEK 9 - Review of Parallel Projection

The different forms of parallel projection will be compared with respect to their benefits in design process

WEEK 10 - Photo and Graphic Editing Techniques

A lecture will be given on the photo montage/editing, framing the instance and collage by using Photoshop. Two studio exercises will be given.

WEEK 11 - From Photo to Video

A lecture will be given on moving image and video medium as a communication tool in a design. The time dimension to be introduced in the visual communication medium is Adobe Photoshop-gif. As a studio exercise, students will be expected to make a GIF by using photos in Photoshop.

WEEK 12 - Technical Drawing Review and Lettering in Technical Drawing

Techniques for efficient construction of different orthographic representations of the same object are treated**.**

WEEK 13 - Technical Drawing Exam

WEEK 14 - Systems of Color and Hybrid Forms of Representation

A lecture on the concepts of color space and complementary colors is given. Combinations among forms of representation, such as photography and elevation drawing will be studied in an experiment, where the complementary color concept will be applied.

WEEK 15 - Portfolio

A lecture will be given on creating effective portfolios. As a studio exercise, students are expected to start designing their portfolio.

COURSE LEARNING OUTCOMES

Students, who complete the course satisfactorily, will be able to:

1) Understand the basic elements of design, theories and systems of color,

2) Use colored, fast drawing techniques; prepare effective presentations,
3) Express ideas, scenarios, concepts graphically,
4) Use 2D and 3D rendering technologies and tool,
5) Create freehand sketching and lettering,
6) Learn the concept of scale, give dimensions on the drawings,
7) Learn the principles of projection, sketch the orthographic views of structural and contextual elements.
8) Apply necessary markings and symbols on drawings.

WEEKLY PROGRAM

Week	Day	Subject	Keywords & Basic Principles	Learning Outcome
1	Sep. 23	**Introduction / Sketch Exercise**	*Several sketches with various techniques*	1,5
2	Sep. 30	**Shape Representation Experiment**	*The problem of visual communication*	1,3,6
3	Oct. 07	**Horizontal Section and Parallel Projection**	*Plan, top view, side view, scale*	6,7,8
4	Oct. 14	**Parallel Projection**	*Elevation*	6,7,8
5	Oct. 21	**Vertical Section**	*Section drawing*	6,7,8
6	Oct. 28	**Context Drawing / Basic Annotation I**	*Axonometric drawing*	6,7,8
7	Nov. 04	**Context Drawing / Basic Annotation II**	*Axonometric drawing*	6,7,8
8	Nov. 11	**Fall Break**		
9	Nov. 18	**Review of Parallel Projection**	*Elevation, Plan, Section*	6,7,8
10	Nov. 25	**Photo and Graphic Editing Techniques**	*Image processing, Photoshop,*	3,4
11	Dec. 02	**From Photo to Video**	*Moving image and video medium, gif*	1,2,3
12	Dec. 09	**Technical Drawing Review and Lettering in Technical Drawing**	*Elevation, Plan, Section Drawings*	6,7,8
13	Dec. 16	**Technical Drawing Exam**	-	-
14	Dec. 23	**Systems of Color and Hybrid Forms of Representation**	*Color theory, coloring*	1,4,5
15	Dec. 30	**Portfolio Presentations**	*Portfolio design*	2,3,4

COURSE CONDUCT and SUBMISSIONS

The course will be held **in class** during the hours announced in the weekly program [Friday, 08.30–12.30] and in accordance with **any guidelines and precautions of the Covid-19 pandemic if necessary**. Course instructors and students will meet in the allocated studio(s) unless specified otherwise by the course instructors. Each student will have a designated work area during the course hours. General assemblies or presentations related to the course may be held in the studio using a virtual platform or in one of the conference rooms in Taşkışla.

It is of utmost importance that students keep their working areas clean while in the studio and speckless at the end of the course. **The studio space will be used by another class after ours so it is both courteous and safe to evacuate on time (no later than 12.30) with all belongings and trash.** Please know and comply with TES Studio Principles. (https://tes.mim.itu.edu.tr/studio-principles/)

CLASS HOURS and ATTENDANCE

It is important that students follow the studio. This means being on time and actively participating in the activities held during the course hours under the direction of the studio instructors. There will be a variety of interactive formats so timeliness is essential for efficient planning and individuals' maximum benefit from peers and instructors. Students are also strongly encouraged to use supporting digital platforms to share multimodal objects and information while interacting with their instructors and peers during studio discussions.

All work is to be produced in accordance with the media, material and format requirements set forth by the instructors in the class or in the announcements made through **Ninova** or other designated platforms. All participants are expected to adhere to the codes of ethical conduct. **https://odek.itu.edu.tr/en/code-of-honor/ethics-in-university-life**

COURSE TECHNOLOGY

Digital platforms will be used during and outside of class hours to communicate, conduct research, produce and share work. **Ninova (Section's common CRN)** will be used for announcements, access to live or recorded Zoom sessions, and digital submissions. It is highly advised that each **student has a laptop computer with the necessary equipment/hardware**. Students are advised to use a computer with access to WiFi, a camera, basic word and picture editing software, and sound features.

COURSE MATERIALS

It is mandatory for students to bring their basic equipment to each course, and modeling materials if needed. Further announcements could be made during the semester if specific materials are needed.

Basic Equipment

- A3 papers in varying heaviness between 80g/m2 and 160g/m2
- Pencils in varying hardness (2H, HB, 2B, etc.)
- Paper tape, drawing matte and tracing paper
- T-square, metal ruler, set square (triangle ruler), compass
- Liners in varying thickness, markers

DISCUSSIONS and PINUPS

Student works are commonly put under the spotlight for discussion. These discussions serve the purpose of articulating the assessment criteria and conveying suggestions for students to develop their work. In these open discussions, students are expected to develop critical perspectives and proactively voice them in the course.

EXHIBITIONS

A selection of student projects will be exhibited digitally both during and at the end of the semester on suitable platforms.

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ANNOUNCEMENTS

Announcements, including those on the media that will be used during a lesson, will take place on Ninova. You are responsible to remain up to date about them. The submissions will be announced and collected using Ninova and other digital platforms. Use of other software for online collaboration, such as 'Miro' and 'Jamboard,' will be announced when applicable. Submission of a work later than the deadline implies the grade zero.

EVALUATION

The requirement for active participation in the course is **80%**. This includes both physically attending classes and completing the in-term assignments/projects throughout the semester. Students who do not meet these conditions will get **VF** and cannot make the final submission. In case you are absent, having provided the required excuse duly and timely, you must still complete all submissions (in-class & homeworks). The deadlines of these submissions will be given to you separately.

For students to be excused from the lectures (absenteeism) and/or submissions, they need to provide a report of a valid excuse (for example, a minimum 3 days of sickness report from **a hospital**). When you are absent, whether or not you give a report, your absence will be counted as *absent* in any case. For example, if you miss 4 lectures, you fail the course even if you have 4 apologies. The health reports that will be brought for the Final Submission should be given to the Dean's Office. The report is required to be issued by an official hospital and be at least of 3 days duration.

Visual Communication I Grade Assessment	Contribution
Submissions during the term (Midterm grade)	%60
Final Submission (Final dossier grade)	%30
Technical Drawing Exam	%10

RECOMMENDED READINGS

1. Allen, S., P*ractice - Architecture, Technique and Representation: Revised and Expanded Edition 2nd Edition* , Routledge, 2009.
2. Ramsey, C.G. and Harold Sleeper, H. Architectural Graphic Standards, 10th edition, Wiley, 2007.
4. Bertoline, G.R., et.al. *Technical Graphics Communication* , McGraw-Hill, 2003.
5. Brooker, G. , Stone, S., *İç Mimarlıkta: Bağlam + Çevre* , Literatür Yayıncılık, İstanbul, 2012.
6. Brooker, G. , Stone, S., *İç Mimarlıkta: Biçim + Yapı, Literatür Yayıncılık* , İstanbul, 2012.
7. Brooker, G. , Stone, S., *İç Mimarlıkta Yapı Bileşenleri ve Nesneler* , Literatür Yayıncılık, İstanbul, 2012.
8. Ching, F. D. K., *Interior Design Illustrated* , John Wiley & Sons, 2012.
9. Ching, F. D. K., *Mimarlık ve Sanatta Yaratıcı bir Süreç: Çizim* ; çev. Çelen Birkan, yem, 2003.
10. Ching, F. D. K., *Architectural Graphics* , Architectural Press, 1984.
11. Cook, P., *Drawing: The Motive Force of Architecture,* Architectural Design Primer, John Wiley & Sons, 2014.
12. Davis, D. A., Walker, T. D., *Plan Graphics* , Wiley, 2000.
13. Earle, J.H., *Engineering Design Graphics* , Addison-Wesley., 1994.
14. Eissen, K., and R. Steur. *Sketching: the Basics* (ed. 2012), BIS Publishers, Amsterdam. 2011.
15. Fraser, I., Henmi, R., *Envisioning Architecture: An Analysis of Drawing* , John Wiley & Sons, 1994.

16. Gagg, *R., İç Mimarlıkta; Doku + Malzeme* , Literatür Yayıncılık, İstanbul, 2013.
17. Giesecke, F.E., et.al., *Engineering Graphics* , MacMillan Publ, 2004.
19. Henry, Kevin. *Drawing for product designers* . Laurence King, 2012.
20. House N., Coles, J., *The Fundamentals of Interior Architecture* , AVA Publishing, 2007.
21. Krisztian, G., Schlempp-Ülker,N., *Visualizing ideas: from scribbles to storyboards* , Thames & Hudson, London, 2006.
22. Kurt S., Gerdemeli İ. and İmrak E., *Mühendislik Çiziminin Esasları*. İstanbul: Birsen Yayınevi, 2011.
23. Lasseau, P., *Freehand Sketching: An Introduction* , W.W. Norton and Co., New York, 2004.
24. Lassaeau, P., *Graphic Thinking for Architects and Designers* , New York: Van Nostrand Reinhold, 2001.
25. Spankie, R., İç *Mimarlıkta:* İç *Mekan Çizimi ve Sunumu* , Literatür Yayıncılık, İstanbul, 2012.
26. Sully, A., *Interior Design: Theory and Process* , A&C Black, 2012.
27. Şahinler, O., Kızıl, F., *Mimarlıkta Teknik Resim* , YEM, 2004
28. Tangaz, T., *Interior Design Course: Principles, Practices, and Techniques for the Aspiring Designer*, Barron's Educational Series, 2006.
29. Taylor, M. and Preston, P., (Eds.), *Intimus: Interior Design Theory Reader,* Wiley, 2006.